

REMARKS

The present Amendment amends claims 3, 13 and 15, and leaves claims 2, 4, 7-12 and 17-19 unchanged. Therefore, the present application has pending claims 2-4, 7-13, 15, and 17-19.

35 U.S.C. §102 Rejections

Claim 13 stands rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 7,185,054 to Ludwig et al. ("Ludwig"). This rejection is traversed for the following reasons. Applicants submit that the features of the present invention as now more clearly recited in claim 13 are not taught or suggested by Ludwig, whether taken individually or in combination any of the other references of record. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

Amendments were made to the claims to more clearly describe features of the present invention. Specifically, amendments were made to the claims to more clearly recite that the present invention is directed to a communication system as recited, for example, in independent claim 13.

The present invention, as recited in claim 13, provides a communication system including a network, and at least two terminal units connected thereto. According to the present invention, each terminal unit includes session controlling means for controlling a session for enabling transmission/receiving of voice, image, and handwritten data to/from a remote terminal unit individually. Each terminal unit also includes display means for displaying the image and the handwritten data, wherein the image data and the handwritten data are overlapped and displayed on a display of the display means. Also included in each terminal unit is an image data transmission controlling means for controlling transmission of image data.

Furthermore, each terminal unit includes an image data receiving controlling means for controlling receiving of image data, where each of the image data transmission controlling means and the image data receiving controlling means selects a name or contents of basic image data to transmit/receive the selected one to/from the remote terminal unit.

According to the present invention, the session controlling means includes means for starting and ending voice communication, image communication and handwritten data communication independently. Also according to the present invention, the means for starting and ending voice communication, image communication and handwritten data communication independently is configured to make at least one of the image communication, handwritten data communication, and voice communication at a high quality, and end other communications even when a through-put of the terminal unit or a number of communication bands is insufficient. The prior art does not disclose all of the above described features.

The above described features of the present invention, as now more clearly recited in the claims, are not taught or suggested by any of the references of record, particularly Ludwig, whether taken individually or in combination with any of the other references of record.

Ludwig teaches participant display and selection in video conference calls. However, there is no teaching or suggestion in Ludwig of the communication system as recited in claim 13 of the present invention.

Ludwig discloses a teleconferencing system for conducting a teleconference among a plurality of participants. The system has a plurality of video display devices, each having associated participant video capture capabilities and participant audio capture and reproduction capabilities. At least one communication

path is provided for transmitting signals representing participant audio and video. A graphical rolodex can be displayed on a participant's video display device and includes a scrollable listing of entries of video-enabled potential participants. Also included is a quick dial list, which lists icons representing video-enabled potential participants copied from the graphical rolodex. The system is configured to allow an initiating participant to initiate collaboration by selecting at least one participant listed in at least one of the graphical rolodex and quick dial list, and to automatically establish one of a plurality of communication types, with a selected participant, upon a communication type being selected or by default when the participant is selected.

One feature of the present invention, as recited in claim 13 includes where the session controlling means includes means for starting and ending voice communication, image communication and handwritten data communication independently, and where the means for starting and ending voice communication, image communication and handwritten data communication independently is configured to make at least one of the image communication, handwritten data communication, and voice communication at a high quality, and end other communications even when a through-put of the terminal unit or a number of communication bands is insufficient. Ludwig does not disclose this feature.

To support the assertion that Ludwig teaches a session controlling means, the Examiner cites column 6, lines 28-39; column 19, lines 11-18; column 36, lines 50-56; column 36, lines 58-63; and Figs. 37 and 40. However, neither the cited text or drawings, nor any other portion of Ludwig, teaches or suggests a session controlling means, as now more clearly recited in the claims.

For example, Ludwig does not teach or suggest where the means for starting and ending voice communication, image communication and handwritten data

communication independently is configured to make at least one of the image communication, handwritten data communication, and voice communication at a high quality, and end other communications even when a through-put of the terminal unit or a number of communication bands is insufficient. As described in column 19, lines 11-18, Ludwig teaches where the user selects the desired session type, e.g., by clicking on a CALL button to initiate a videoconference call, a SHARE button to initiate the sharing of a snapshot image or blank whiteboard, or a MAIL button to send mail. This is not the same as the session controlling means of the present invention.

Therefore, Ludwig fails to teach or suggest "wherein the session controlling means comprises means for starting and ending voice communication, image communication and handwritten data communication independently, and wherein said means for starting and ending voice communication, image communication and handwritten data communication independently is configured to make at least one of the image communication, handwritten data communication, and voice communication at a high quality, and end other communications even when a through-put of the terminal unit or a number of communication bands is insufficient" as recited in claim 13.

Therefore, Ludwig does not teach or suggest the features of the present invention, as recited in claim 13. Accordingly, reconsideration and withdrawal of the 35 U.S.C. §102(e) rejection of claim 13 as being anticipated by Ludwig are respectfully requested.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the references used in the rejection of claim 13.

35 U.S.C. §103 Rejections

Claims 2-4, 7-12 and 17-19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ludwig in view of U.S. Patent No. 6,542,165 to Ohkado. This rejection is traversed for the following reasons. Applicants submit that the features of the present invention, as now more clearly recited in claims 2-4, 7-12 and 17-19, are not taught or suggested by Ludwig or Ohkado, whether taken individually or in combination with each other in the manner suggested by the Examiner. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

Amendments were made to the claims to more clearly describe features of the present invention. Specifically, amendments were made to the claims to more clearly recite that the present invention is directed to a communication system as recited, for example, in independent claim 3.

The present invention, as recited in claim 3, provides a communication system including a network, and at least two terminal units connected thereto. According to the present invention, each terminal unit includes session controlling means for controlling a session for enabling transmission/receiving of voice, image, and handwritten data to/from a remote terminal unit individually. Each terminal unit also includes display means for displaying the image and the handwritten data, where the image data and the handwritten data are overlapped and displayed on a display of the display means. Also included in each terminal unit is an image/handwritten data managing means for managing image/handwritten data, where the image/handwritten data managing means has a plurality of planes, and where the managing means displays basic image data on one of the plurality of planes, the one of the plurality of planes being an image data plane, and displays

handwritten data currently handled in communication on a different plane, the different plane being a handwritten data plane, so that image and handwritten data are displayed so as to overlap each other by putting the different planes in layers.

According to the present invention, the session controlling means includes means for starting and ending voice communication, image communication and handwritten data communication independently. Also according to the present invention, the means for starting and ending voice communication, image communication and handwritten data communication independently is configured to make at least one of the image communication, handwritten data communication, and voice communication at a high quality, and end other communications even when a through-put of the terminal unit or a number of communication bands is insufficient. The prior art does not disclose all of the above described features.

The above described features of the present invention, as now more clearly recited in the claims, are not taught or suggested by any of the references of record. Specifically, the features are not taught or suggested by either Ludwig or Ohkado, whether taken individually or in combination with each other.

As previously discussed, Ludwig teaches participant display and selection in video conference calls. However, there is no teaching or suggestion in Ludwig of the communication system as recited in claim 3 of the present invention.

One feature of the present invention, as recited in claim 13 includes where the session controlling means includes means for starting and ending voice communication, image communication and handwritten data communication independently, and where the means for starting and ending voice communication, image communication and handwritten data communication independently is configured to make at least one of the image communication, handwritten data

communication, and voice communication at a high quality, and end other communications even when a through-put of the terminal unit or a number of communication bands is insufficient. Ludwig does not disclose this feature.

To support the assertion that Ludwig teaches a session controlling means, the Examiner cites column 6, lines 28-39; column 19, lines 11-18; column 36, lines 50-56; column 36, lines 58-63; and Figs. 37 and 40. However, neither the cited text or drawings, nor any other portion of Ludwig, teaches or suggests a session controlling means, as now more clearly recited in the claims.

For example, Ludwig does not teach or suggest where the means for starting and ending voice communication, image communication and handwritten data communication independently is configured to make at least one of the image communication, handwritten data communication, and voice communication at a high quality, and end other communications even when a through-put of the terminal unit or a number of communication bands is insufficient. As described in column 19, lines 11-18, Ludwig teaches where the user selects the desired session type, e.g., by clicking on a CALL button to initiate a videoconference call, a SHARE button to initiate the sharing of a snapshot image or blank whiteboard, or a MAIL button to send mail. This is not the same as the session controlling means of the present invention.

Therefore, Ludwig fails to teach or suggest "wherein the session controlling means comprises means for starting and ending voice communication, image communication and handwritten data communication independently, and wherein said means for starting and ending voice communication, image communication and handwritten data communication independently is configured to make at least one of the image communication, handwritten data communication, and voice

communication at a high quality, and end other communications even when a through-put of the terminal unit or a number of communication bands is insufficient"
as recited in claim 13.

The above noted deficiencies of Ludwig are not supplied by any of the other references of record, namely Ohkado, whether taken individually or in combination with each other. Therefore, combining the teachings of Ludwig and Ohkado in the manner suggested by the Examiner still fails to teach or suggest the features of the present invention as now more clearly recited in the claims.

Ohkado teaches a system, apparatus and method of relating annotation data to an application window. However, there is no teaching or suggestion in Ohkado of the communication system as recited in claim 3 of the present invention.

Ohkado discloses a system, apparatus and method for generating a transparent window on an application window designated by an operator. An annotation is drawn in the transparent window depending on the kind of message generated on the transparent window. Ohkado's system can be used in collaborating with another terminal located in a remote location. There are a scheme in which a window of an application to be collaborated and a transparent window corresponding thereto are started in the both systems and only the data such as an image drawn on the transparent window is transmitted to the collaborating system and another scheme in which an application to be collaborated is run only on one of the systems and an image merging the annotation data is transmitted to the other system.

One feature of the present invention, as recited in claim 13 includes where the session controlling means includes means for starting and ending voice communication, image communication and handwritten data communication

independently, and where the means for starting and ending voice communication, image communication and handwritten data communication independently is configured to make at least one of the image communication, handwritten data communication, and voice communication at a high quality, and end other communications even when a through-put of the terminal unit or a number of communication bands is insufficient. Ohkado does not disclose this feature, and the Examiner does not rely upon Ohkado for teaching a session controlling means.

Therefore, Ohkado fails to teach or suggest "wherein the session controlling means comprises means for starting and ending voice communication, image communication and handwritten data communication independently, and wherein said means for starting and ending voice communication, image communication and handwritten data communication independently is configured to make at least one of the image communication, handwritten data communication, and voice communication at a high quality, and end other communications even when a through-put of the terminal unit or a number of communication bands is insufficient" as recited in claim 13.

Both Ludwig and Ohkado suffer from the same deficiencies, relative to the features of the present invention, as recited in the claims. Therefore, combining the teachings of Ludwig and Ohkado in the manner suggested by the Examiner does not render obvious the features of the present invention as now more clearly recited in the claims. Accordingly, reconsideration and withdrawal of the 35 U.S.C. §103(a) rejection of claims 2-4, 7-12 and 17-19 as being unpatentable over Ludwig in view of Ohkado are respectfully requested.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the references used in the rejection of claims 2-4, 7-12 and 17-19.

Claim 15 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Ludwig in view of U.S. Patent No. 6,624,827 to Hwang et al. ("Hwang"). This rejection is traversed for the following reasons. Applicants submit that the features of the present invention, as now more clearly recited in claim 15, are not taught or suggested by Ludwig or Hwang, whether taken individually or in combination with each other in the manner suggested by the Examiner. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

Amendments were made to the claims to more clearly describe features of the present invention. Specifically, amendments were made to the claims to more clearly recite that the present invention is directed to a communication system as recited, for example, in independent claim 15.

The present invention, as recited in claim 15, provides a communication system including a network, and at least two terminal units connected thereto. Each terminal unit includes session controlling means for controlling a session for enabling transmission/receiving of voice, image, and handwritten data to/from a remote terminal unit individually. Each terminal unit also includes display means for displaying said image and said handwritten data, where said image data and said handwritten data are overlapped and displayed on a display of said display means. Each terminal unit further includes a handwritten data inputting means for obtaining handwritten data input by a user, where the handwritten data inputting means, by one of two terminal units' start of transmitting/receiving handwritten data to/from the

other, starts effecting exclusive control so that one terminal unit is allowed to input/transmit handwritten data in contrast the other terminal unit is not allowed.

According to the present invention, the session controlling means includes means for starting and ending voice communication, image communication and handwritten data communication independently. Also according to the present invention, the means for starting and ending voice communication, image communication and handwritten data communication independently is configured to make at least one of the image communication, handwritten data communication, and voice communication at a high quality, and end other communications even when a through-put of the terminal unit or a number of communication bands is insufficient. The prior art does not disclose all of the above described features.

The above described features of the present invention, as now more clearly recited in the claims, are not taught or suggested by any of the references of record. Specifically, the features are not taught or suggested by either Ludwig or Hwang, whether taken individually or in combination with each other.

As previously discussed, Ludwig teaches participant display and selection in video conference calls. However, there is no teaching or suggestion in Ludwig of the communication system as recited in claim 15 of the present invention.

One feature of the present invention, as recited in claim 13 includes where the session controlling means includes means for starting and ending voice communication, image communication and handwritten data communication independently, and where the means for starting and ending voice communication, image communication and handwritten data communication independently is configured to make at least one of the image communication, handwritten data communication, and voice communication at a high quality, and end other

communications even when a through-put of the terminal unit or a number of communication bands is insufficient. Ludwig does not disclose this feature.

To support the assertion that Ludwig teaches a session controlling means, the Examiner cites column 6, lines 28-39; column 19, lines 11-18; column 36, lines 50-56; column 36, lines 58-63; and Figs. 37 and 40. However, neither the cited text or drawings, nor any other portion of Ludwig, teaches or suggests a session controlling means, as now more clearly recited in the claims.

For example, Ludwig does not teach or suggest where the means for starting and ending voice communication, image communication and handwritten data communication independently is configured to make at least one of the image communication, handwritten data communication, and voice communication at a high quality, and end other communications even when a through-put of the terminal unit or a number of communication bands is insufficient. As described in column 19, lines 11-18, Ludwig teaches where the user selects the desired session type, e.g., by clicking on a CALL button to initiate a videoconference call, a SHARE button to initiate the sharing of a snapshot image or blank whiteboard, or a MAIL button to send mail. This is not the same as the session controlling means of the present invention.

Therefore, Ludwig fails to teach or suggest "wherein the session controlling means comprises means for starting and ending voice communication, image communication and handwritten data communication independently, and wherein said means for starting and ending voice communication, image communication and handwritten data communication independently is configured to make at least one of the image communication, handwritten data communication, and voice communication at a high quality, and end other communications even when a

through-put of the terminal unit or a number of communication bands is insufficient”
as recited in claim 13.

The above noted deficiencies of Ludwig are not supplied by any of the other references of record, namely Hwang, whether taken individually or in combination with each other. Therefore, combining the teachings of Ludwig and Hwang in the manner suggested by the Examiner still fails to teach or suggest the features of the present invention as now more clearly recited in the claims.

Hwang teaches an apparatus and method for locking or prohibiting access to a designated object displayed on shared electronic whiteboard. However, there is no teaching or suggestion in Hwang of the communication system as recited in claim 15 of the present invention.

Hwang discloses a method for locking or prohibiting an access to at least one object in an electronic conferencing system. The method includes the steps of: a) initiating an electronic conference in the conference initiator system having an electronic whiteboard, the electronic whiteboard containing at least one object; b) participating conference participant systems in the electronic conference, thereby sharing the electronic whiteboard with the conference initiator system; c) sending a lock request corresponding to the object from a conference participant system to the conference initiator system in order to obtain the priority over the access to the object corresponding to the lock request from the conference initiator system or prohibit the access to the object performed by another conference participant system not having the priority; and d) giving a priority over an access to the object to the conference participant system according to a sequence of lock requests in response to the lock request.

One feature of the present invention, as recited in claim 13 includes where the session controlling means includes means for starting and ending voice communication, image communication and handwritten data communication independently, and where the means for starting and ending voice communication, image communication and handwritten data communication independently is configured to make at least one of the image communication, handwritten data communication, and voice communication at a high quality, and end other communications even when a through-put of the terminal unit or a number of communication bands is insufficient. Hwang does not disclose this feature, and the Examiner does not rely upon Hwang for teaching a session controlling means.

Therefore, Hwang fails to teach or suggest "wherein the session controlling means comprises means for starting and ending voice communication, image communication and handwritten data communication independently, and wherein said means for starting and ending voice communication, image communication and handwritten data communication independently is configured to make at least one of the image communication, handwritten data communication, and voice communication at a high quality, and end other communications even when a through-put of the terminal unit or a number of communication bands is insufficient" as recited in claim 13.

Both Ludwig and Hwang suffer from the same deficiencies, relative to the features of the present invention, as recited in the claims. Therefore, combining the teachings of Ludwig and Hwang in the manner suggested by the Examiner does not render obvious the features of the present invention as now more clearly recited in the claims. Accordingly, reconsideration and withdrawal of the 35 U.S.C. §103(a)

rejection of claim 15 as being unpatentable over Ludwig in view of Hwang are respectfully requested.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the references used in the rejection of claim 15.

In view of the foregoing amendments and remarks, Applicants submit that claims 2-4, 7-13, 15, and 17-19 are in condition for allowance. Accordingly, early allowance of claims 2-4, 7-13, 15, and 17-19 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (referencing Attorney Docket No. 501.42868X00).

Respectfully submitted,

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